MULTIPORT NETWORK ANALYZER CALIBRATION EMPLOYING RECIPROCITY OF A DEVICE

ABSTRACT OF THE INVENTION

A multiport vector network analyzer calibration employs measurements of an asymmetric reciprocal device to determine a value of a defining parameter of a calibration standard in a set of calibration standards. A method of determining a parameter value determines and reports the parameter value. A method of compensating a calibration determines the parameter value and employs the determined parameter value to optimize a set of error coefficients of an error model of the multiport vector network analyzer. A multiport vector network analyzer that includes a controller, a test set, and computer program executed by the controller, compensates a calibration using the determined parameter value and a set of optimized error coefficients. A calibration compensation system that includes a multiport vector network analyzer, a computer, and a computer program executed by the computer, determines and reports the parameter value.